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DEPARTMENT OF CONSERVATION- DARRYL YOUNG, DIRECTOR

CALIFORNIA GEOLOGICAL SURVEY

MICHAEL S. REICHLE, ACTING STATE GEOLOGIST

Prepared in cooperation with the U.S. Geological Survey,
Southern California Areal Mapping Project

GEOLOGIC MAP OF THE SATICOY 7.5' QUADRANGLE

VENTURA COUNTY, CALIFORNIA: A DIGITAL DATABASE

VERSION 1.0

Siang S. Tan¹, Kevin B. Clahan² and Anne M. Rosinski²

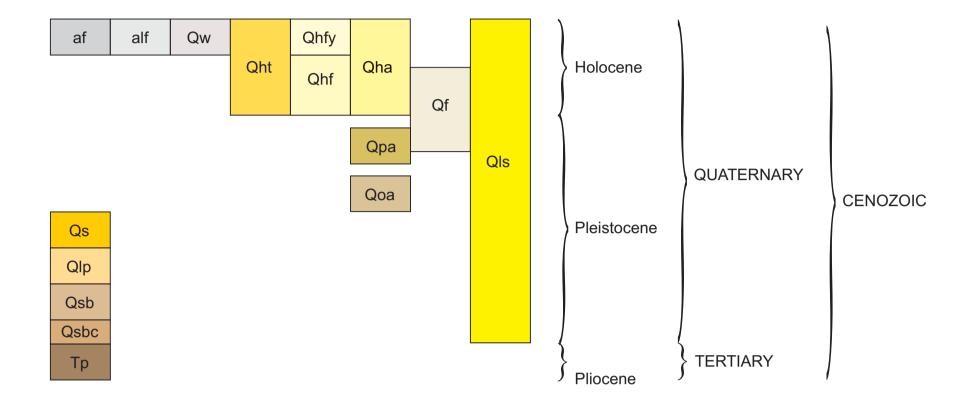
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Carlos I. Gutierrez³ and Marina T. Mascorro²
2004

California Geological Survey, 655 Hope Street #700, Los Angeles, CA 90017
 California Geological Survey, 185 Berry Street, Suite 210, San Francisco, CA 94107
 California Geological Survey, 801 K Street, MS-32, Sacramento, CA 95814



CORRELATION OF MAP UNITS



EXPLANATION OF MAP UNITS

af Artificial fill (Holocene, historic) - May be engineered and/or non-engineered.

alf Artificial levee fill (Holocene, historic) - May be engineered and/or non-engineered.

Qw Wash deposits within major river channels (Holocene) - Composed of unconsolidated silt, sand and gravel.

Alluvial fan deposits (latest Holocene) - Latest Holocene age is indicated by historical inundation or the presence of youthful braid bars and distributary channels, often deposits emanate from a point partway down the alluvial fan slope. Composed of moderately to poorly sorted and bedded gravel, sand, silt, and

Qht Stream terrace deposits (Holocene) - Deposited in point bar and overbank settings, composed of unconsolidated clayey sand and sandy clay with gravel.

Undivided alluvial deposits (Holocene) - Located on the floors of valleys, includes active stream deposits in hill slope areas. Deposited as overbank material, recognized by scour and incised channeling features, composed of unconsolidated clayey sand and sandy clay with some gravel.

Alluvial fan deposits (Holocene) - Deposited by streams emanating from mountain canyons onto alluvial valley floors, deposits originate as debris flows, hyperconcentrated mudflows, or braided stream flows; composed of moderately to poorly sorted, and moderately to poorly bedded, sandy clay with some

Alluvial fan deposits (late Pleistocene to Holocene) - Deposited on gently sloping, relatively undissected alluvial surfaces where deposits might be of either late Pleistocene or Holocene age, composed of moderately to poorly sorted sand, gravel, silt, and clay.

Undivided alluvial deposits (Pleistocene) - Consists of unconsolidated and consolidated silt, sand, clay, and gravel.

Alluvial deposits (early to middle Pleistocene) - Moderately to deeply dissected, undifferentiated alluvial deposits where topography often consists of gently rolling hills with little or none of the original planar surface preserved, or tilted surfaces along active range fronts, composed of moderately to poorly sorted and bedded gravel, sand, silt, and clay.

Qls

Landslide deposits (Holocene to Pleistocene) - Includes numerous active landslides, composed of weathered, broken up rocks and soil, extremely susceptible to renewed landsliding.

Saugus Formation (Pleistocene) - Weakly consolidated alluvial deposits composed of sandstone and siliceous shale, gravel, and cobbles in sandy matrix, moderately susceptible to landsliding.

QIp Las Posas Formation (Pleistocene) - Weakly consolidated sandstone, with some gravelly sand units, highly susceptible to landsliding.

Santa Barbara Formation (Pleistocene) - Claystone, locally contains Monterey Formation shale fragments, highly susceptible to landsliding. Qsbc = conglomerate, sandstone and claystone.

Undivided Pico Formation (Pliocene) - Composed of claystone, siltstone, and sandstone, locally pebbly, generally susceptible to landsliding.

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MAP SYMBOLS

Contact between similar map units of different relative age - Generally approximately located.

Fault - Approximately located or inferred, dotted where concealed, queried where location is uncertain.

Axis of anticline - Solid where accurately located, dashed where approximately located, dotted where concealed, queried where location is uncertain; arrow indicates direction of plunge.

Axis of syncline - Solid where accurately located, dotted where concealed, queried where location is uncertain; arrow indicates direction of plunge.

Terrace scarp along the Santa Clara River.

Strike and dip of bedding.



Landslide - Arrows indicate principal direction of movement, queried where existence is questionable (some geologic features are drawn within questionable landslides); hachured where headscarp is mappable.

REFERENCES

The bedrock geology of the present map is largely modified from Dibblee (1992).

Dibblee, T.W., Jr., 1992, Geologic map of the Saticoy quadrangle, Ventura County, California: Dibblee Geological Foundation Map DF-42, scale 1:24,000.Edwards, R.D., Rabey, D.F. and Kover, R.W., 1970, Soil survey of the Ventura area, California: U.S. Department of Agriculture, Soil

Conservation Services, 151 p., scale 1:24,000.

Grigsby, F.B., 1988, Structural development of the Ventura Avenue anticlinal trend at the San Miguilito and Rincon oil fields, Ventura

County, California: Coast Geological Society, Field Guide No. 64, p. 111-124.

Hitchcock, C.S., Lindvall, S.C., Helms, J.D., Randolph, C.E., Weaver, K.D., and Lettis, W.R., 2000, Liquefaction hazard mapping, Ventura County, California: Final Technical Report, U.S. Geological Survey, Award 99-HQ-GR-0117, 21 p., 4 plates.

Hoirup, D.F., Rosinski, A., and Irvine, P.J., 2003, Earthquake-induced landslide zones in the Saticoy quadrangle, Ventura County,

California: California Geological Survey Seismic Hazard Zone Report 066, Section 2, p. 21-38.

Lajoie, K.R., Sarna-Wojcicki, A.M., and Yerkes, R.F., 1982, Quaternary chronology and rates of crustal deformation in the Ventura area,

California: Geological Society of America Guidebook, Neotectonics of the Ventura Basin, field trip number 3, p. 43-51.

McCoy, G. and Sarna-Wojcicki, A.M., 1978, Preliminary map showing surficial materials of the Ventura-Oxnard plain area, California: U.S. Geological Survey Open-File Report 78-1065, scale 1:125,000.

Morton, D.M., 1976, Reconnaissance surficial geologic map of the Santa Paula, Santa Paula Peak, Saticoy, and Ojai 7.5' quadrangles, Ventura County, California: U.S. Geological Survey Open-File Report 76-212, sheet no. 3, scale 1:24,000.

Rockwell, T.K., Johnson, D.L, Keller, E.A., and Dembroff, G.R., 1985, A late Pleistocene-Holocene soil chronosequence in the central Ventura Basin, southern California, U.S.A., in Richards, K., Arnett, R., and Ellis, S., editors, Geomorphology and soils: London, England, George Allen and Unwin, p. 309-327.

Sarna-Wojcicki, A.M., Williams, K.M. and Yerkes, R.F., 1976, Geology of the Ventura fault, Ventura County, California: U.S. Geological Survey Miscellaneous Field Studies Map MF-781, 3 sheets, scale 1:6,000.

Smith, T.C., 1976, Fault evaluation report for the Ventura Fault: California Division of Mines and Geology Fault Evaluation Report-13, 13 p.; Supplement No. 1, 1977; Supplement No. 2, 1978.

Weber, F.H., Jr., Cleveland, G.B., Kahle, J.E., Kiessling, E.W., Miller, R.V., Mills, M.F., Morton, D.M., and Cilweck, B.A., 1973, Geology and mineral resources study of southern Ventura County, California: California Division of Mines and Geology, Preliminary Report 14, 102 p., scale 1:48,000.

Yeats, R.S., 1983, Large-scale Quaternary detachments in Ventura Basin, Southern California: Journal of Geophysical Research, v. 88, no. B1, p. 569-583.

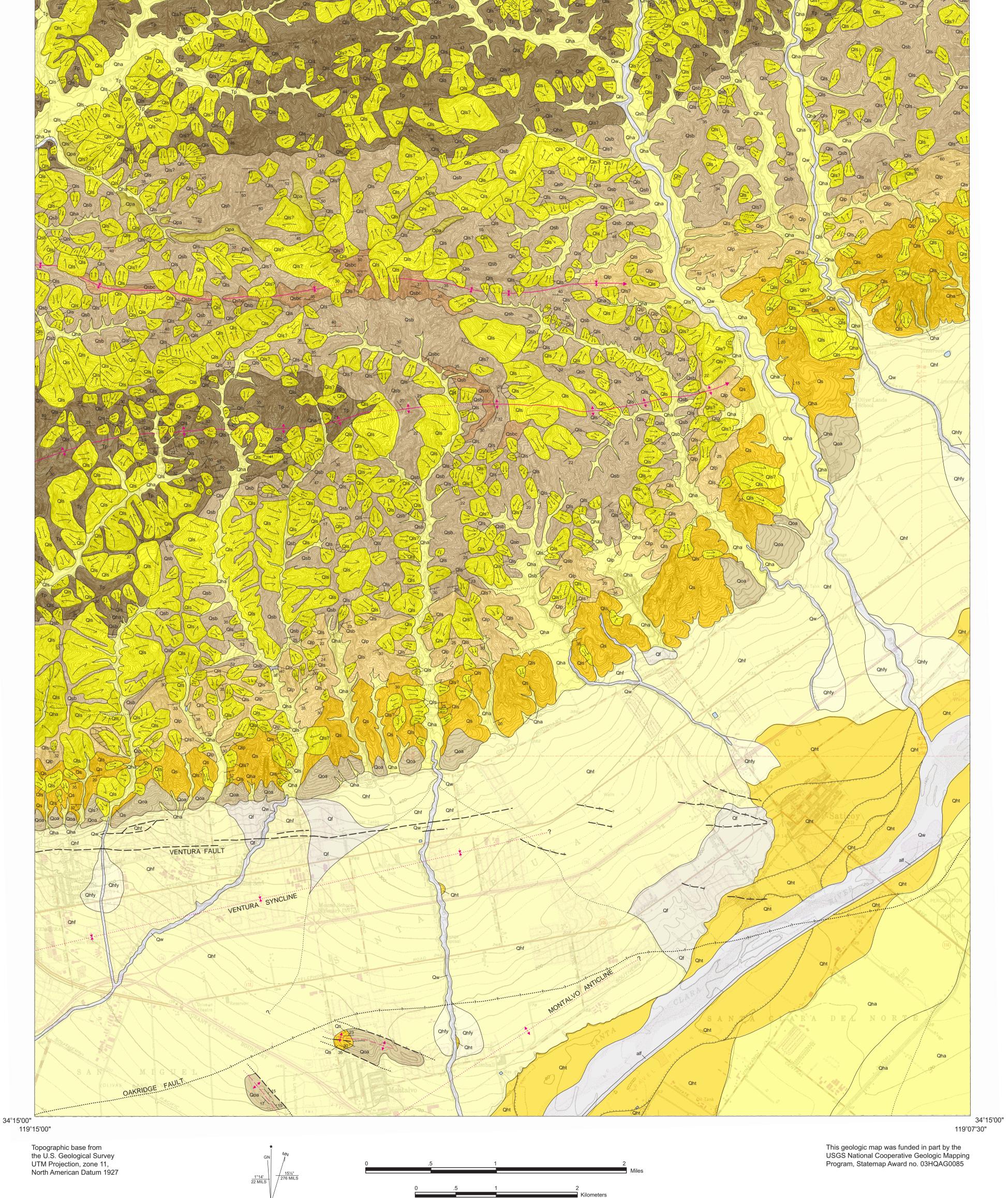
Yeats, R.S., Huftile, G.J. and Grigsby, F.B., 1988, Oak Ridge fault, Ventura fold belt, and the Sisar decollement, Ventura Basin, California: Geology, v. 16, p. 1112-1116.

Yerkes, R.F., Sarna-Wojcicki, A.M., and Lajoie, K.R., 1987, Geology and Quaternary deformation of the Ventura area: U.S. Geological Survey Professional Paper 1339, p. 169-178, Plate 11.1, scale 1:24,000.



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